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TITLE : POWDER PAINTING METHOD FOR POLYETHYLENE

ABSTRACT : PURPOSE: To obtain PE films having an interfacial intermediate layer which is highly resistant to heat and has good adhesive strength including water resistance by treating metallic materials with an aq. organotitanium compd., then melt coating the same with PE powder after preheating.

CONSTITUTION: After the surfaces of iron or steel materials are cleaned, a calcium modified zinc phosphate treatment is preferably applied thereon, and the materials are treated with an aq. organotitanium compd. soln. After preheating, the surfaces are melt coated with PE powder. Chelate compds, contg. hydroxyl carboxylic acid as a component of chelate, for example, the compds. prepd. by reaction of tetraalkyl titanate and hydroxyl carboxylic acid which is 1 or  $\geq 2$  kinds among glycolic acid, lactic acid, malic acid or citric acid or their ammonium salts are more particularly effective for the above-mentioned org. titanium compd. Said aq. organotitanium compd. is so prepd. as to contain  $\geq 1\text{g/l}$  the hydroxyl carboxylic acid-contg. titanium chelate compd. and has 3-10pH.

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